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Thomas G. Field Jr  
*Franklin Pierce Law Center*

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# LAW/SCIENCE IN LAW SCHOOLS

THOMAS G. FIELD, JR.\*

Hugh Gibbons has recently completed a four-part series in which he concludes that there are three questions:<sup>1</sup>

... about science and technology that are singularly within the province of law: (1) How should technology be employed in the legal process? (2) In what ways should law affect science and technology? (3) Under what scheme should decisions about science and technology be made?

Also, he concludes that these questions should be addressed in law schools.<sup>2</sup> I agree. It would be difficult to determine what *should* be done in each instance without determining what *is* being done. Moreover, it would seem to be impossible to address, *e.g.*, the third question without being mindful of various uniquely legal constraints such as those imposed by the Constitution.<sup>3</sup>

In thinking about those things, I am reminded of the lowly gum band. For years, gum bands have been holding things together (but nothing so vital as what the legal system holds together). Yet only recently has anything been learned about *how* gum bands work.<sup>4</sup> So long as something works perhaps it isn't very important to know *why* it works, but if it quits working or isn't working as well as might be wanted, the *hows* and *whys* become vital to progress.

Lawyers, of course, aren't accustomed to thinking in such terms. Over the years, the legal system has been perfected by tinkering. When faced with novel problems, various things have been tried: those

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\*Professor of Law Franklin Pierce Law Center

<sup>1</sup> *The Relationship Between Law and Science*, (Part IV), 22 IDEA 283, at 284 (1982).

<sup>2</sup> *Id.*, at 306-308

<sup>3</sup> For example, after several decades of neglect at the federal level there is some sentiment for reexamining the extent to which legislatures can delegate the power/responsibility for making basic policy decisions. *See, e.g.*, *Industrial Union v. American Petroleum Institute*, 100 S.Ct. 2844, at 2864-67 (1980)

<sup>4</sup> *See, e.g.*, *Stretch of Imagination*, April 1981, SCIQUEST 3.

which seemed to work<sup>5</sup> have been kept; those which didn't seem to work have been discarded. Unfortunately, little attention has been given, *e.g.*, to controlled evaluation of alternative solutions to legal problems,<sup>6</sup> and some of the efforts along that line have not been warmly received.<sup>7</sup> If we are ever to get beyond the tinkering stage, law schools will probably have to exercise some leadership.<sup>8</sup>

However, such matters are not likely to become a core component of legal education in the near future, if ever. For that reason, it is useful also to direct attention to law/science issues which ought to be a part of every lawyer's education. Far too few lawyers seem to appreciate the potential for using scientific knowledge or scientists' skills in all kinds of legal controversies. Those who do appreciate that potential sometimes get carried away.<sup>9</sup> The real issue, it seems, is: Where can scientific information be used to advantage in legal processes? More fundamentally the question might be: How do we measure "advantage?" (What kind of advantage? To whom?)

Over the past several years, I have tried to develop a lecture course to address those kinds of issues.<sup>10</sup> Also, this past year I devised six appellate advocacy problems which raised one or more of them rather pointedly.

The current bibliography for the course follows as an appendix to this comment and largely speaks for itself. To the extent the elaboration would be necessary for someone who might be interested in teach-

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<sup>5</sup> Of course, just because something *seems* to work doesn't necessarily mean it is working; *see, e.g.*, Mosteller, *Innovation and Evaluation*, 211 *SCIENCE* 881 (1981).

<sup>6</sup> One of the more interesting efforts to learn more is discussed briefly in *Cann Explains Plea Bargaining Experiment*, 8 *N.H. Law Weekly* 205, Dec. 9, 1981.

<sup>7</sup> *See, e.g.*, Henry, . . . *The Role of Empirical Evidence in Developing Labor Law*, 1981 *U. ILL. L. REV.* 1. *See, also*, *The Science Court Experiment: An Interim Report*, 193 *SCIENCE* 654 (1976) — for better or worse, that particular experiment was never tried; *see, e.g.*, Jasanoff and Nelkin, *Science, Technology and the Limits of Judicial Competence*, 214 *SCIENCE* 1211, at 1214 (1981).

<sup>8</sup> *See, e.g.*, Yegge, *Introduction: the Implications of Science-Technology for the Legal Process*, 47 *DENVER, L.J.* 549, 550-51 (1970).

<sup>9</sup> *See, e.g.*, Greely, *In Soft Defense of Sociologists*, 23(2) *N.Y.U.L. SCH. BULL.* 26 (1977). *See, also, e.g.*, Rosenberg, *Anything Legislatures Can Do, Court Can Do Better?*, 62 *A.B.A.J.* 587 (1976) — particularly the discussion of *Hawkins*, at 588-89.

<sup>10</sup> Entitled *Science in the Legal Process*. For discussions of early efforts along those lines, *see* Field, *Law and Science*, 16 *JURIMETRICS* 106 (1975); *Training Lawyers to Cope With Science*, 4(3) *LEARNING AND THE LAW* 28 (1977); and *Science, Law and Public Policy: Meeting the Need in Legal Education*, 13 *N. ENG. L. REV.* 214 (1978). A bibliography used in the course follows as an appendix to this comment.

ing such a course, it would take considerably more space than is available here. For that reason, I would like to focus on the issues raised in the appellate advocacy problems.

Three of the problems followed much the same process pattern, although the substantive areas were quite different. One was designed to test the continuing validity of the fertile octogenarian rule in the face of vastly improved medical knowledge;<sup>11</sup> a second examined the problems of proof in applying the American rule in lateral support cases;<sup>12</sup> and the third addressed the relative merits of the accepted-medical-practice and Learned-Hand-formula standards in medical malpractice cases.<sup>13</sup> Moreover, each case raised the doctrine of stare decisis — providing an opportunity to evaluate comparatively the appropriateness of legislative and judicial process in dealing with such issues.

The other three problems tended to focus on the traditional “law/fact” dichotomy as used to apportion responsibilities within the legal process. One did so in the context of a *Kewanee*-type preemption problem;<sup>14</sup> a second did so in exploring the constitutionality of a state “filled milk” statute;<sup>15</sup> and the third (which was ultimately used only for illustrative purposes in the lecture course) focused on the “unreasonably dangerous” and/or “defective” concepts in a products liability case.<sup>16</sup>

Our appellate advocacy program is organized in such a way as to permit students to elect the problems they want to work on. Notwithstanding that most of our students do not have a strong scientific/technical background<sup>17</sup> and that few of them are likely to pursue a career strongly emphasizing one of the traditional “law/science”

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<sup>11</sup> See, e.g., *Re Bassett Estate*, 104 N.H. 504 (1963). [Copies of this and the other problems are available upon request.]

<sup>12</sup> See, e.g., J. CRIBBETT, *PRINCIPLES OF THE LAW OF PROPERTY*, 365-7 (2d Ed., 1975).

<sup>13</sup> See, e.g., *Helling v. Carey*, 519 P.2d 981 (Wash. 1974); also Epstein, *The Limits of Medical Malpractice*, 298 N. ENG. J. MED. 1311 (1978).

<sup>14</sup> *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470 (1974), focusing in particular upon the empirical justification for nonpreemption, at 489-90.

<sup>15</sup> *Vernon's (Tx.) Ann. Civil St.*, art 4474a. See *Martin v. Wholesome Dairy, Inc.*, 437 S.W.2d 586 (Tx. Civ. App. 1969); compare *Milnot v. Douglas*, 452 F.Supp. 505 (S.D. W.V. 1978).

<sup>16</sup> See, e.g., Montgomery and Owen, *Reflections on the Theory and Administration of Strict Tort Liability for Defective Products*, 27 S. CAR. L. REV. 803, at 830 (1976).

<sup>17</sup> Moreover, several of those who have such a background elected to enter the Giles S. Rich Patent Moot Court Competition sponsored by the AM. Pat. L. Assn.

areas,<sup>18</sup> over half of the first-year class chose to work on one of the problems described above.<sup>19</sup> Yet, regardless of ultimate career paths, it is doubtful that anyone will find that their time was wasted in pursuit of some sort of esoteric subject matter.

Problems involving science in the legal process are nevertheless legal process problems. When technical subject matter is involved (or potentially involved), however, the process issues become more pointed and their resolution becomes more compelling. As a consequence, a subject which students often regard as uninteresting tends to generate much more lively discussion. If "science" did nothing except to increase student interest, that alone would warrant its inclusion in legal process courses.

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<sup>18</sup> The majority of our graduates have traditionally gone into small (general) law offices — indeed, even some who have had more lucrative offers from corporations and patent law firms.

<sup>19</sup> *Science in the Legal Process* is also a first-year course — one of four courses which can be elected in the spring term. Because of an enrollment overlap, it was possible to use all of the problems for illustrative purposes in the lecture course. In fact, the combination of approaches (moot court problems and process lectures) worked better than either, alone. Perhaps in the future it will be possible to devise a way to more completely integrate the two approaches.

# SCIENCE IN THE LEGAL PROCESS

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